

QD
215

INFORMATION REPORT INFORMATION REPORT

CENTRAL INTELLIGENCE AGENCY

This material contains information affecting the National Defense of the United States within the meaning of the Espionage Laws, Title 18, U.S.C. Secs. 793 and 794, the transmission or revelation of which in any manner to an unauthorized person is prohibited by law.

25X1C

C-O-N-F-I-D-E-N-T-I-A-L

COUNTRY Czechoslovakia

REPORT NO. [REDACTED]

25X1A

SUBJECT Atomic Warfare Training

DATE DISTR.

26 August 1955

25X1X

NO. OF PAGES

9

25X1A

REQUIREMENT NO. [REDACTED]

REFERENCES

SOURCE EVALUATIONS ARE DEFINITIVE. APPRAISAL OF CONTENT IS TENTATIVE.

25X1

--

C-O-N-F-I-D-E-N-T-I-A-L

STATE #	X	ARMY #	X	NAVY #	X	AIR #	X	FBI #	AEC				
---------	---	--------	---	--------	---	-------	---	-------	-----	--	--	--	--

(Note: Washington distribution indicated by "X"; Field distribution by "#".)

INFORMATION REPORT INFORMATION REPORT

CONFIDENTIAL

REPORT NO. [redacted]

25X1A

COUNTRY Czechoslovakia

DATE DISTR. 26 July 1955

25X1C

SUBJECT Atomic Warfare Training

NO. OF PAGES 8

REFERENCES:

25X1X

THIS IS UNEVALUATED INFORMATION

25X1X* Organization and Training of Personnel

1.

25X1

room instruction concerning individual and small unit defensive measures to be taken in the event of atomic attack. This instruction was given to all members of his unit, which was divided into groups of perhaps 20 men per group for instructional purposes, since it was impossible to give such instructions to the entire battalion, approximately 150 EM, at one time without interrupting the airbase operations.

25X1X

25X1X

2.

25X1

Lectures were conducted by the Chief of Chemical Warfare (chemicky nacelnik) of the [redacted] Upon arrival at Mlada in July 1954, [redacted] an infantry uniform for about three weeks. Thereafter, [redacted] in air force uniform but kept the rank of lieutenant.

25X1

25X1X

25X1

25X1

25X1

25X1

CONFIDENTIAL

CONFIDENTIAL

- 2 -

25X1A

25X1X

Training Aids

3. [redacted] the instructor had a series of about ten 1.5 x 1 m. pictures showing in sequence the manner in which the cloud of an atomic blast took shape. They were hand-drawn, probably by a commercial artist, in black and red inks. Red ink was used to illustrate the explosion and heat radiation. One of the pictures depicted the final aspect of an explosion; the other pictures depicted the foregoing progressive stages of an explosion. These pictures were classified "Secret" ("Tajne").

25X1X

4. [redacted] gave the lecture on atomic warfare utilizing an unidentified manual. The manual had gray soft covers, contained an estimated 100 pages, and was about 20 x 15 cm. in size. This manual was not registered in Secret Control and [redacted] did not have an opportunity to see its classification. Troops did not receive any training manuals on atomic warfare, nor were they required to take notes during classes. No examinations were held upon completion of the course.

25X1X

5. The class was shown a small clay or plastic model of an individual "fox hole", which, it was told, would offer protection to anyone within the area of an atomic blast. This small model of a one man shelter measured approximately 25 x 13 x 15 cm. It was supposed to take six hours to dig this shelter in normal soil and longer if the soil were harder. Such an emplacement, according to [redacted], would afford protection as close as 50 m. from ground zero.

25X1X

Description of U-Shaped One-Man Anti-Atomic Shelter (See memory sketches, pages 7 and 8.)

6. The bottom of the U-shaped one-man anti-atomic shelter was to slope gradually from a depth of about one meter at the gas cape partition to about 1.5 m. at the end of the shelter where the soldier would assume a crouched position. The shelter was to be about 0.6 m. wide throughout, except that at the far end of the shelter, where a soldier was to assume a crouched position, it was to be about 0.8 m. wide.
7. The wall of the shelter facing the direction of explosion was 1.5 m. wide, with the opposite end of the shelter having the same width. The length of the shelter was to be approximately two meters.
8. A soil parapet of well-packed soil was to encircle the entire shelter with an extension between the arms of the U (see page 7). The section of the parapet which was to face the expected direction of the explosion was to be 1.8 m. long, 1.2 m. wide, approximately 0.8 m. high at the edge of the shelter, and gradually sloping out from the shelter toward the ground level.
9. The parapet surrounding the side and rear of the shelter was to be approximately 0.5 m. wide and 0.5 m. high, also gradually sloping out from the shelter toward ground level.
10. This shelter was divided into two compartments at the gas cape partition by a gas protective cape (plastenka), which was issued to every soldier together with a regular chemical warfare gas mask. The entire shelter from the gas cape partition to the location where the soldier was to assume a crouched position was to be covered by available logs, branches, and twigs, and topped by soil. A thickness of 0.5 to 0.8 m. was recommended for this covering.

CONFIDENTIAL

CONFIDENTIAL

- 3 -

25X1A

25X1X Practical Exercises

11. [redacted] never participated in or heard of practical exercises to construct an "atomic fox hole" or any other form of tactical atomic warfare drills.
12. Instruction on atomic warfare first aid or decontamination was not given [redacted]. However, the instructor mentioned that a first aid point would be located somewhere behind the company lines. The approximate distance behind the lines for the location of the first aid point was mentioned, [redacted]. At this location first aid would be administered to those in need and individuals would be checked for radiation contamination.

25X1

Reports on Training

13.

Content of Instruction in General

14. Instruction consisted mainly of a description of the characteristics of an atomic explosion, how an atomic warhead could be theoretically delivered, and what precautions must be taken to protect the individual soldier.
15. The purpose of the atomic warfare training, according to the instructor's introductory statement, was to acquaint the soldier with a new weapon which could be used against him, to teach the soldier how to recognize this new weapon, and to train the soldier in methods of self-protection against it.
16. [redacted] mentioned that the United States had atomic bombs, and reference was made to those dropped on Hiroshima and Nagasaki during World War II. No mention was made as to whether or not the USSR or Czechoslovakia had such bombs or atomic weapons or whether or not either of these countries carried on experiments with atomic weapons.

25X1X

25X1X Basic Theoretical Instruction on Atomic Explosions

17. [redacted] had explained in some detail the difference between an atomic bomb and an ordinary bomb explosion. [redacted] pointed out that with an ordinary bomb the resulting irregularly-shaped smoke vanished quickly, while an atomic explosion was accompanied by an unusually brilliant light flash, then a very strong crushing blast and an intense heat wave of very short duration, and a slowly rising mushroom-shaped white cloud over the spot of the explosion which lingered for a considerable time in the air. [redacted] did not mention the duration of any of these stages of the explosion.

CONFIDENTIAL

CONFIDENTIAL

- 4 -

25X1A

25X1X

18. [redacted] the instructor described the very destructive effect of the heat wave, primarily on exposed parts of the human body such as the face and hands. The heat wave also set fire to clothes and wooden stocks of weapons within its range. The class was told that a by-product of the explosion was internal injury to the human body.

19. The most dangerous area near the atomic bomb explosion, [redacted] recalled being told, was within a radius of approximately 800 m. In order to cause the most damage, an atomic bomb would be exploded about 200 to 400 m. above ground level.

25X1

Theoretical Instruction on Methods of Delivery of Atomic Warheads

20. The instructor explained that there were three means by which atomic weapons could be delivered against a potential enemy -- bombers, atomic artillery, and guided missiles.

21. It was expected that atomic bombs delivered by an airplane would be dropped attached to a parachute, in order to give the airplane time to fly out of the blast area. [redacted] being instructed that atomic bombs could explode in the air, upon contact with the ground, underneath the surface of water, and upon contact with the surface of water. The higher above ground the atomic bomb exploded, the less destructive it became. Radioactivity produced by an atomic bomb exploded underwater lasted longest. The weight and size of an atomic bomb was quoted, [redacted]

25X1X

25X1X [redacted] an atomic bomb contained a destructive power equivalent to either 40 tons or 40,000 tons of TNT and was much smaller than a non-atomic bomb.¹

25X1X

- 25X2X. [redacted] explained that atomic weapons could be delivered by artillery as well, with the same characteristics accompanying the explosion but on a much smaller scale. The white, mushroom-shaped cloud would form, and it would not produce a very strong crushing blast but strong heat and radioactive waves. The smoke resulting from the explosion of atomic artillery round, according to [redacted] would have a strong irritating, garlic-like odor.

23. No mention was made as to which nation had the potentiality of delivering artillery or guided missiles loaded with an atomic charge or of the manner of delivery. [redacted] merely stated that such potentialities existed.

25X1X

Individual and Small Unit Defense Measures

24. Concerning individual and small unit defense measures, the class groups [redacted] were told that only a shelter constructed like the model should be dug. Special protective clothing would also be issued. [redacted] was unable to describe the protective clothing. The shelter would be constructed only in the event of an advance notice of planned atomic attack. In the event of a surprise attack, each soldier was instructed to fall flat on the ground with his back turned to the explosion and to cover himself with his "gas protective cape" ("plastenka") from head to foot, especially the head. Each soldier had been issued a "plastenka" along with his gas mask. If a ditch or a bomb or artillery crater were nearby, it was to be utilized, since the safest and most desirable position was beneath the ground so the radioactive waves would pass above the body. If possible, something substantial such as a hill, pile of soil, wall, house, or tree should be used for protection. Soldiers were told not to turn and look in the direction of the explosion but to remain in a flat position until a pre-arranged "all clear" signal was given by the members of the company special atomic patrol (atomova hlidka).

CONFIDENTIAL

CONFIDENTIAL

- 5 -

25. Special protective clothing was to be issued for covering the face and hands of each individual soldier, and special protective clothing would also be issued to the members of the company atomic detection patrol. Samples of such clothing were not shown since they were not as yet available. For the time being, according to the instructor, a handkerchief over the face would give some protection to a soldier against the heat wave from the explosion.

25X1X

26. [redacted] it was planned that each commanding officer would have a special atomic patrol organized in addition to the chemical warfare squad. Members of this atomic patrol were to be selected from members of each unit and were to receive special protective clothing and radiation detection instruments. The number of patrol members or material used for their protective clothing were not mentioned. Atomic patrol duties were to be performed in addition to their regular duties. No mention was made as to the strength or organization of these patrols, nor was the special equipment described. [redacted] did appoint one man out of each group of 20 attending the lectures to be a member of the patrol which was to be formed.

25X1X

25X1X

27. [redacted] a practical atomic defense demonstration would be held outdoors at some future date, upon the arrival of expected protective clothing and detectors. No such class was held [redacted]

25X1X

Instruction at Pilot Officers' Training Center

25X1X

28.

25X1X

25X1X

[redacted] It was given by a Lieutenant Colonel of the Czechoslovak Army, branch unknown [redacted] who had the title of doctor of technical science from the Military Experimental Institute (Vyzkumny vojensky ustav) in Prague. This lecture was theoretical in nature and the lecturer went into minute details on the current construction of atomic bombs, the nature of a chain reaction, and causes of an atomic explosion. The only detail [redacted] could recall from this lecture was that an atomic bomb contained some heavy water, plutonium, and uranium. The clash of these substances caused the explosion, according to the lecturer. Figures and progressive steps causing such an explosion were given and shown through about 20 sketches called "diapositives" [redacted]. They were shown through a lantern slide type projector. The classification of these sketches was not indicated. [redacted] not [redacted] recall any additional information.

25X1X

25X1X

25X1

25X1

25X1

25X1X

29. [redacted] about five different types of radiation-detection devices were shown. Each device could detect radioactivity under one specific set of conditions or circumstances. He could remember only vague information about three of the devices. One of these could detect radioactivity only in the water, one only in the air, and one only in "solid ground" (sic). Some of these devices, he remembered, had graph faces on which the intensity of radiation would be indicated by a needle. Other devices produced sounds. With respect to sizes, source stated that some were approximately 30 cm. long and 30 cm. high. [redacted] only the front of these devices from where he sat, he could not estimate their width. These devices could each be carried in a strap-type carrier. [redacted] had no opportunity to examine them closely since they were displayed on the podium from which the instructor delivered his lecture and source was seated some distance away. [redacted] other types of radiation detectors, such as film badges or dosimeters, were not mentioned in any lecture he attended.

25X1

25X1

25X1X

CONFIDENTIAL

CONFIDENTIAL

- 6 -

25X1A

25X1X Special Courses on Atomic Warfare

30.

--

25X1X Other Atomic Warfare Manuals

31.

25X1X

[redacted] two copies each of two manuals. These two manuals were of the same general size, type, and color as those [redacted] during classroom instruction. These two manuals had the following titles: Atomic Warfare (Atomová válka) and Protection Against Atomic Warfare (Ochrana proti atomové válce). They were classified "Top Secret" (Prisne tajne).

25X1X

32. These manuals were translations of Soviet military manuals. On the upper right-hand corner of their covers, the title of the original Soviet manual was printed in Cyrillic type. The name of the translator was indicated under the title. [redacted] was unable to remember the original titles in Russian or the names of the translators. Dates of publication of the Czech translations were also indicated, but [redacted] was unable to remember them. He assumed, however, that they were probably published sometime in April 1954 because manuals of this type were usually received [redacted]

25X1X

25X1X [redacted] approximately two months after publication.

25X1X

25X1X [redacted] had learned casually through these manuals, but he remembered only that drawings, not photographs, of atomic explosions were included. He did not notice any of his unit officers borrowing these manuals for study.

25X1A 1. [redacted] Comment: This probably was 40,000 or 40 KT as it is commonly referred to in the "trade". Atomic explosives of as low a quantity as 40 tons are not believed possible.

25X1A 2. [redacted] Comment: An aspirant was an airman serving compulsory military service who had graduated from an NCO school which he was selected to attend upon completion of his basic training. Such aspirants were usually commissioned after a certain period of time, depending upon their efficiency and political activity and reliability, without attending a Military Academy. Men of political reliability were selected as aspirants and were urged to remain in the service at the completion of their compulsory service term, if by this time they were not commissioned. Those aspirants who were commissioned prior to the completion of their compulsory service had to remain automatically in the service for five years. After these five years they were either released from active duty or kept on active duty indefinitely.

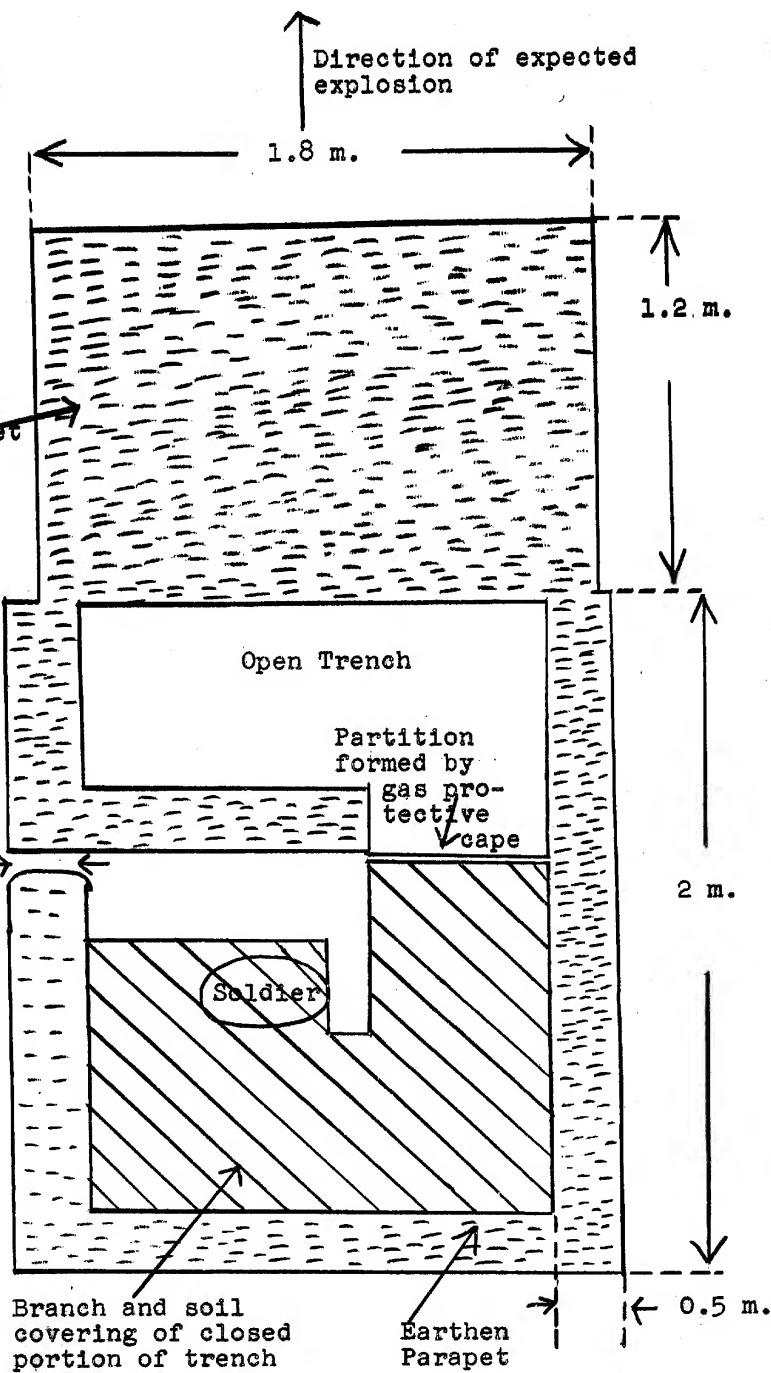
CONFIDENTIAL

CONFIDENTIAL

- 7 -

Plan View of U-Shaped One-Man Anti-Atomic ShelterTop of Completed Shelter
(Not to Scale)

25X1



CONFIDENTIAL

CONFIDENTIAL

- 8 -

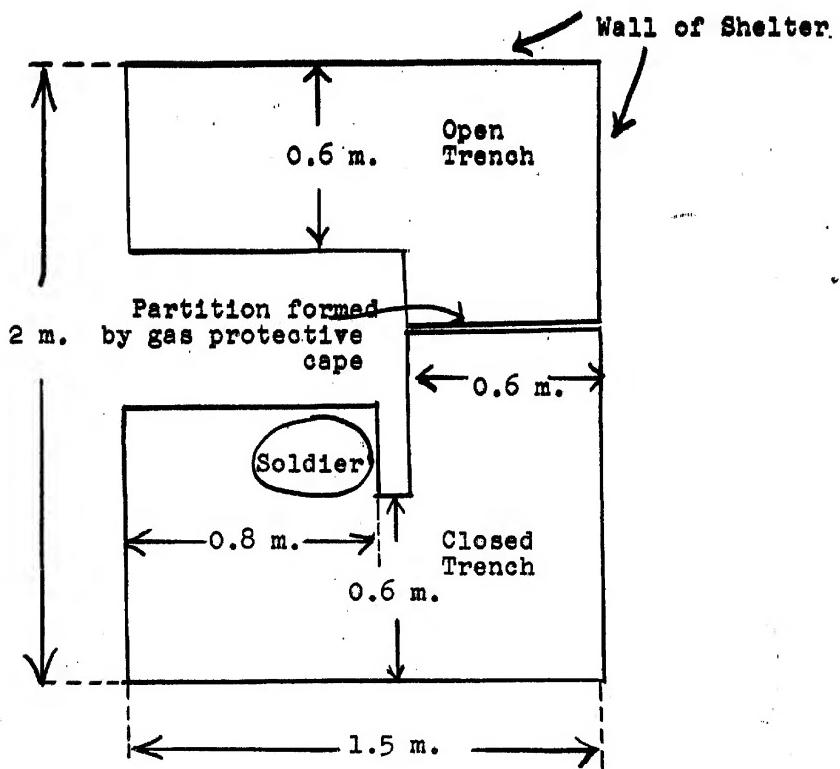
25X1A

Plan View of U-Shaped One-Man Anti-Atomic Shelter

Bottom of Shelter

(Not to Scale)

25X1



CONFIDENTIAL